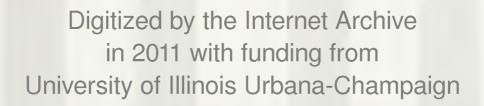


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# **Faculty Working Papers**

ORGANIZATIONAL DECLINE: SOURCES, RESPONSES AND EFFECTS

David A. Whetten, Assistant Professor, Department of Business Administration

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College of Commerce and Bu: ness Administration
University of Illinois at Urbana-Champaign



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## Summary:

This paper argues that a strong growth orientation has pervaded the organizational literature in our society since World War II. However, as we enter an Era of Scarcity a greater number of organizations will experience decline, and hence the study of decline becomes critical. After discussing the concept of decline and its treatment at the organizational population level in the literature, the bulk of the paper focuses on the sources, responses and effects of decline. Four sources of decline are discussed: atrophy, vulnerability, loss of legitimacy, and environmental entropy. Next, four generic responses to decline are reviewed: defending, responding, preventing, and generating. Differences in the prevailing responses in public and private organizations are discussed, as well as the difference between prescriptions of how organizations should respond and descriptions of how they actually respond. Finally, the effects of decline on morale, stress, turnover, conflict and innovation are discussed.

#### Acknowledgment:

I am indebted to the Faculty of Business at the University of Calgary and the OB group at the University of Illinois for giving me opportunities to talk through some of my ideas on this subject. In particular, the comments and suggestions of Gerald Salancik have been very helpful. Also, my discussions with Charles Levine and Irene Rubin have been both informative and stimulating.



Managing declining organizations and coping with the consequences of retrenchment are pressing societal problems. Evidence of decline is pervasive. Schools are cutting back due to decreasing enrollments, industry is laying off record numbers in response to recessionary pressures; the military had to scale down its operations after Viet Nam; many churches have been forced to close their doors due to lack of support; and municipal services are being curtailed as a result of declining revenues. The consequences of decline are far reaching. Families suffer the effects of unemployment and the morale of the remaining workers deteriorates as they are forced to fight over smaller and smaller resource pools. When an entire industry retrenches the effects are felt society-wide. For example, the displacement of 30 million farm workers due to increased mechanization in agriculture is claimed by some to represent the genesis of our contemporary urban problems (Boulding, 1974).

So alarming are the potential consequences of wide-spread organizational decline that several scholars have proposed radically new forms of government and commerce to meet this impending crisis (Benveniste, 1977; Heilbronner, 1976; Commoner, 1976). Whether or not these proposals will be adopted, it is clear that our society is ill prepared to cope with decline. Since World War II our country has enjoyed unprecedented growth, and as Kenneth Boulding (1974) has noted, all our institutions have become adapted to survival under conditions of rapid growth. The need to adapt to emerging conditions of scarcity represents a significant challenge at the individual, organizational, and professional levels.

At the individual level, decline runs counter to our strong success ethic. During this country's golden era of abundance the values of

optimism and self assurance have reigned unchallenged (Sutton, et al, 1956). The ease with which people are able to live in an expanding economy encourages an ego centered orientation (Fox, 1967). With few threats to collective interests, individuals are free to pursue personal accomplishment. However, under conditions of munificence, ease is confused with effort, and success with accomplishment. During this age of The Power of Positive Thinking (Peale, 1952), when we are instructed to Think and Grow Rich (Hill, 1967), it is the norm to ascribe success to personal accomplishment. The dark side of this philosophy that success can be willed, is that it implies failure reflects personal incompetence. This logical trap is also reflected in the tendency to treat organizational growth as evidence of youth and vitality, since decline then becomes equated with old age and senility. So powerful is the association between growth and success, and decline and failure, in our society that Scott (1976) has proposed that the chief issue in the management of declining organizations is not whether managers are capable, but instead, whether they are willing. The best hands are generally the first to abandon a sinking ship, and it is difficult to sign on a new crew for a ship that is taking on water (Argenti, 1976; Hirschman, 1970).

To illustrate the extent to which the success ethic is engrained in our culture, when individuals must discuss a failure experience they tend to describe it as though it were a personal success. Personal credit is taken for being: perceptive enough to recognize that a marriage partner was ruining our life; capable enough to keep a business from losing any more than it did before we had sense enough to bail out; so ethical, smart, or experienced that our former boss felt threatened by our presence in the organization.

At the organizational level, during a period of economic expansion there are more organizational births than deaths, and more growth than decline. For example, between 1950 and 1975 there were 2.2 million business starts and only 100,000 deaths (Statistical Abstract, 1976). During a period of rapid expansion, decline and death are discomforting anomolies that are explained away as examples of failure to properly implement fundamental management principles. Because growth has been the norm in our country for decades, the experiences of managers in declining organizations have not been widely documented (Smith, 1963). As a consequence, as we enter a period of economic slow down during which a larger number of organizations will experience decline, their managers have relatively few precedents or guidelines to rely on (Bogue, 1972). Recognizing this problem, Boulding (1974) has called for the establishment of clearing houses to facilitate the exchange of ideas and suggestions between managers coping with decline.

At the professional level, organization behavior teachers and researchers are ill-prepared to provide the necessary support services for administrators in declining organizations because the field is dominated by a growth paradigm (Scott, 1974, Whetten, 1979c). For example, few courses are taught on management in declining organizations or under crisis conditions. Further, many of the models used to teach administration assume conditions of expansion. For example, a typical textbook discussion of conflict management instructs students to resolve conflicts over resource allocation by formulating a "win-win" alternative. When munificence prevails this is a realistic prescription, since offers of

side payments or promises of larger portions in the future can be made. However, when the total resource pie is shrinking the win-win option becomes less plausible since current losses are not likely to be made up in future allocations.

Organizational research has also been dominated by studies on growth related topics. The work of Blau and his associates (Blau, 1968, 1970; Blau and Schoenherr, 1971) dealt primarily with the problem of maintaining coordination in an expanding organization. This line of research spawned numerous studies on administrative ratios (Pondy, 1969; Rushing, 1967; Indik, 1964), and the relationship between control strategies and other organizational properties, such as, innovation (Hage and Aiken, 1967), and professionalization (Hall, 1968). While interest in this line of research has wanned, the growth oriented paradigm it represented remains strong (Benson, 1977; Kotter and Sathe, 1978).

A strong growth orientation is also reflected in the organizational development literature (Greiner, 1972). One of the most frequently stated reasons for an OD intervention is that workers are alienated due to the negative effects of increasing organizational size. The use of profit centers, inter-department integrators, team building, and humanistic leadership practices represent attempts to infuse an intimate, supportive, and tractable environment into large, complex organizations.

While our society as a whole is ill-prepared to cope with widespread decline, we have little option (Boulding, 1973; Daly, 1973, 1977). The industrial complex has been forced to cut back in response to double digit inflation and an aroused public's concern about the rapid depletion of our natural resources (Schumacher, 1973; Commoner, 1976; Meadows, et al, 1972); educational institutions have been forced to retrench due to declining enrollments (Trow, 1975; Green, 1974; Cartter, 1970); and government's legitimacy and resource base have been eroded by a taxpayers' revolt over poor services and high taxes (Smith and Hague, 1971; Dvorin and Simmons, 1972; Whetten, 1979b, Fenno, 1966).

The purpose of this paper is to call attention to the need for a large scale examination of organizational decline. Twenty years ago growth was recognized as an organizational crisis and a monumental research program was initiated in response. The growith process has now become routinized and decline is replacing it as a pressing organizational concern. Decline actually warrants considerably more research than growth, since its effect on the organization and society are more profound, its causes are more obscure, and management has greater difficulty responding to it.

To facilitate this substantial undertaking we will first examine the concept of decline, and then review the highly diverse literature relating to this topic. Our overall objective is to surface important researchable issues.

# Decline as a Concept

The word decline has two principal meanings in the organizational literature. First, it is used to denote a cut back in the size of work force, profits, budget, clients, etc. This reflects the case where an organization's command over environmental resources is reduced either as the result of decreased competitive advantage, i.e., reduced market share, or decreased environmental munificence, i.e., the total market shrinks. A decrease in market share might reflect poor management, but

a shrinking market generally does not. The erosion of an inner city's tax base due to white flight, a decrease in a school district's enrollment, or the availability of oil during the embargo of 1972 all reflect drastic changes in environmental munificence which are beyond the control of a city department, school superintendent, or gasoline retailer. The best that an organization can do under these conditions is to anticipate a down-turn and buffer the production technology from its effects by stockpiling raw materials, diversifying services or product lines, or expanding into recession resistent markets. The object is to reduce the element of crisis in decline through the use of forecasting techniques, diversification, and contingency plans for rationing (Thompson, 1967).

Decline is also used to describe the general climate, or orientation, in an organization. Using a life cycles model some authors speak of mature organizations becoming stagnant, bureaucratic, and passive, as evidenced by their insensitivity to new product developments, workers' interests, and customers' preferences. This condition of deterioration may or may not result in a loss of revenues. One of the traditional arguments against monopolistic markets is that they allow firms to become stagnant without experiencing serious repercussions. Similar observations have been made about the consequences of a lack of competition in the public sector (Roessner, 1979). Kolarska and Aldrich (1978), Ansoff (1970), and Cyert and March (1963) argue that under competitive conditions a decline in revenues triggers a revitalization cycle in the organization.

It is important to note that decline-as-stagnation does not necessarily imply an absolute decrease in income whereas decline-as-cut back does. Stagnation is more often reflected as a decrease in the rate of increase, rather than as an actual decrease. This distinction is useful because it highlights the fact that it is decline—as—cut back, not stagnation, that is the emerging crisis ushered in by as era of scarcity. The problem of stagnating organizations has been around for generations, and is actually less likely to occur during periods of scarcity since the two forms of decline are activated by opposing environmental conditions. Stagnation is more likely to occur during periods of abundance, whereas cut back is more likely during times of scarcity. The focus of this paper will be primarily on cut back.

#### The Literature on Organizational Decline

The literature related to organizational decline is very broad and diverse. Unfortunately very little of this material reports empirical research. Instead the literature is dominated by case study descriptions of declining organizations, arm chair analyses of the causes of decline based on reviews of published case studies, and prescriptive guidelines for preventing, or coping with, decline. In the literature, decline has been examined at two levels of analysis: within a population of organizations, and in individual organizations. Conceptual and empirical work focused at each level will be discussed in turn.

#### Population Level

The dominant theoretical orientation in this area is the natural selection model (Aldrich, 1974; Aldrich and Pfeffer, 1976; Campbell, 1969; Hannan and Freeman, 1977). Its principal components are three ecological processes which proponents argue occur in all biological and

sociological populations. These processes, or stages, are variation, selection, and retention. In a population of organizations variation in member characteristics occurs due to either planned or unplanned actions. Consequently, the model does not require the assumption of administrative rationality, or intentionality. Applications of this model have tended to overlook the historical development of variations and concentrated primarily on their effect on survival. The second stage, selection, reflects a differential rate of survival within a population. As certain variations are reinforced by the environment, some members develop a superior competitive advantage. The retention stage signifies that certain positively valued characteristics have been preserved, duplicated, or reproduced in the population. Thus, the focus of the natural selection model is primarily on the birth rate (rather than the death rate as many suppose) of a mutant strain (Stebbins, 1965). The competitive advantage of a species does not appear suddenly in one generation, instead it emerges gradually over several generations as the number of its members possessing a positively valued characteristic increases geometrically.

This model has been strongly advocated by Kaufman (1975, 1973) and sharply challenged by Penrose (1952). Kaufman argues that most models of organizational processes are overly rational, "Our pride in personal accomplishment seems exaggerated." He reasons that the evolutionary model explains all that can be treated by rational models, plus a great deal more. In critiquing rational models he asks, "Why do some organizations adhere to practices that caused others to die? Why isn't the world filled with old organizations? Why don't organizations with the

smartest people always survive the longest?" (1975:144-45) In rebuttal, Penrose argues that the evolutionary model is too deterministic. For example, she attacks the naivete reflected in "variability analysis" in economics which assumes that the firm with the highest profits will be selected by the environment. She argues that attempts, such as this, to extrapolate from biology to sociology overlook the emergent characteristic of purposive behavior in human populations. The fact that many organizations develop considerable expertise in forcing their environments to adapt to them is not considered in the evolutionary model.

While several other authors have noted the difficulties of applying the natural selection model literally to the study of organizations (Aldrich and Pfeffer, 1976; Weick, 1969; Aldrich, 1979; Stebbins, 1965; Child, 1972) it is clearly a useful heuristic device for analyzing changes in the composition of a population of organizations over time. Examples of research using this approach include Nielsen and Hannan (1977), Aldrich and Reiss (1976), Freeman and Hannan (1975), and Hannan and Freeman (1978).

There are several researchable questions emerging from this literature which warrant further investigation. We will examine two. First, "What organizational characteristics will enhance adaptability to the environmental conditions anticipated in the future?" This question represents the heart of the organizational growth/decline issue. In order to understand the growth and decline processes one must first understand the conditions which determine the more fundamental states of survival and death.

There is an extensive body of literature predicting future environmental conditions. Some futurists have argued that our pluralistic. decentralized, capitalistic system is doomed. As it becomes more and more evident that contemporary institutions are unable to respond adequately to the increasing turbulence and complexity of their environment, they will be replaced with centralized planning and a socialist economy which fosters a more equalitarian distribution of increasingly scarce resources (Heilbronner, 1976; Commoner, 1976). Others, on the other hand, have proposed that the present trend towards increased complexity and centralization will eventually be checked because it is antithetical to the American spirit. As a result, there will be even greater emphasis placed on individualistic enterprise and mediating structures. (Miles, 1976; Berger and Neuhaus, 1977). However, in general it is assumed that organizations in the future will be located in turbulent, centralized, and highly complex environments (Bennis, 1966; Vacca, 1973; Kaufman, 1973; Chadwick, 1977; Ansoff, 1965).

There has been considerably more disagreement over the ideal organizational characteristics for these environmental conditions. There is clearly not unanimous agreement regarding the characteristics which will be selected out by the anticipated turbulent and complex environmental conditions in the future. The most widely discussed organizational characteristics are size, age, auspice, internal control, and structural complexity. These have been included in many cross sectional organizational studies and lend themselves to a population ecology study. Some have argued that large size and old age are liabilities under these conditions. As an organization increases in size and age it tends to become more bureaucratic and inefficient; it is more difficult to change

quickly; it makes more enemies as it encroaches on a greater number of sacred domains; it becomes a larger target for militants and regulators alike; and it has fewer options for expansion as it reaches the maximum share of its markets allowed by law (Rubin, 1979; Bennis and Slater, 1968). Others have argued that small, young organizations will have the greatest difficulty surviving since they are inexperienced; the consequences of a bad decision, or a sudden downturn in the economy are intensified due to a lack of buffering slack resources; and the negative effects of interpersonal conflict are more difficult to contain (Stinchcomb, 1965; Levine, 1978; Kaufman, 1975; Boswell, 1973; Perrow, 1969). There is also considerable disagreement over the advantages of centralization vs. decentralization in turbulent environments. Burns and Stalker (1961), Aldrich (1978) and Porter and Olsen (1976) have argued in favor of decentralization. For example, Porter and Olsen maintain that a generalist in an outpost office is more responsive to changing environmental conditions than a specialist in a centralized headquarters. On the other hand, Hawley and Rogers (1974), Yarmolinsky (1975) and Rubin (1979) have countered that decentralization can immobilize a system facing a turbulent environment. Yarmolinsky uses the term "institutional paralysis" to describe the university's inability to change, because no single interest group has sufficient power to alter the organization's course.

There is considerably more agreement about the adaptive value of loose coupling. This concept addresses the extent to which units in an organization must interact with one another in order to perform their systemic functions is a more fundamental structural characteristic. While loose coupling is generally associated with decentralization,

there is a difference between the two concepts. Generally, when we think in terms of centralization/decentralization we are treating the organization as an integrated whole. The parts of the organization are assumed to be working in concert towards common objectives, and the extent to which power is delegated is an indication of the number of people involved in making strategic plans for reaching these objectives. A decoupled system is quite different. Its components share a low level of interdependence, as illustrated by Thompson's (1967) concept of pooled interdependence. A business conglomerate is an example of this concept since each subsidiary has the power to select product lines, adjust prices, and alter its operating structure, as long as these decisions do not adversely affect profits. Several authors have argued that this type of institutional structure facilitates long term adaptability (Weick, 1976; Aldrich, 1979; Glassman, 1973). Not only is this structural configuration highly flexible, and therefore responsive, but in addition, the freedom given each unit to respond to its unique environment tends to produce a large pool of internal variety over time. This diversity makes the organization robust since it is not adversely affected by changes in one sector of its environment (Ashby, 1956; Hedberg et al., 1976; Rubin, 1979). The principal liability of this design is that it is extremely difficult for the organization as a whole to make purposive coordinated changes, if that becomes necessary. The operating units strongly resist the usurption of their autonomy and their response to programs initiated by the central office varies from foot dragging to defiant opposition. Hence, a loosely coupled structure is best suited for organizations whose units do not need to respond to environmental

changes in unison. The institutional paralysis in the face of massive environmental change, spoken of by Yarmolinsky, results when an organization consisting of sequentially or reciprocally interdependent parts (Thompson, 1967) adopts the structure of a holding company primarily because this design is compatible with the institution's values of autonomy and self governance. If the Chemistry department in a university begins to think of itself as the ABC Widget Company in a large conglomerate, the university has lost any chance of mustering a coordinated response to declining environmental resources.

There is also considerable agreement regarding the effect of auspices on organizational responsiveness. Many authors have noted the lack of incentives for innovation in the public sector. Rainey et al. (1976) have identified several key differences between public and private organizations. Public organizations have less market exposure, more environmental constraints, and more political influences affecting internal operations. As a result, these organizations are marked by: more complex and contradictory goals, less autonomy, less delegation of authority, more turnover, greater difficulty in linking individual performance with incentives, lower overall worker satisfaction and commitment, and greater variation in member characteristics and abilities. Drucker (1974) has proposed that the key difference between public and private organizations which influences their incentive to innovate is the "mode of payment". Public organizations are rewarded by a budget increase, while private organizations are rewarded by satisfied customers and repeat business. Roessner (1979) attributes the lower number of innovations in public organizations to the fact that innovations in the private sector are stimulated by

production efficiency while innovations in the public sector are motivated by bureaucratic self interest (Yin, 1978). The trend towards "third sector" organizations, e.g., the U.S. Postal Servic, reflects efforts by the federal government to make key public service organizations more responsive to market conditions.

The fact that the field does not totally agree on the constellation of organizational characteristics which enhances adaptability in turbulent and complex environments signals a strong need for further research in this area. While a number of empirical studies have tested various contingency theories of organizational design (Pennings, 1975; Dewar and Webel, 1979) this line of research has been flawed by a lack of longitudinal data. While business failure studies typically examine the performance of a large subject pool over time, unfortunately these studies generally rely exclusively on secondary data (Brough, 1969; Altman, 1971). Consequently, their analyses tend to not be very rich or insightful. While these studies are nicely complemented by several published case studies of the collapse of notable business enterprises (Smith, 1963; Birchfield, 1972; Daughen and Binzen, 1971), there remains a substantial need for more systematic research on the organizational characteristics which foster adaptability. Populations of organizations containing variance on the various salient organizational characteristics identified by Hedberg et al. (1976), Argenti (1976) and others should be identified and studied over time to determine whether they indeed predict organizational performance. The alternative societal conditions predicted for the future can be identified on a micro scale today and a study of the survival rates of various organizational

configurations under these conditions could be conducted. Another possibility for this type of research is to simulate various types of environmental conditions in a laboratory setting building on the work of Miles and Randolph (1979) and McCaskey (1974).

A second population level research question is, "What effect does decline in one organization have on other members of a population?" While this is not an ecological question it is related to populations. This question is prompted by the work of Aiken and Hage (1968). They proposed that organizations respond to scarcity by establishing joint programs to distribute the costs of innovation. In their model, staff members propose more innovations than an organization can fund. To make up the difference, other organizations are invited to co-sponsor new ventures. It is logical to assume that when resources shrink this process will increase. Since one of the consequences of joint programs is that it increases the couplings between members of a population, the effect of only a few members of a population needing to retrench is to make the entire network richly joined. As a result, the network becomes less stable, less flexible, and hence, less adaptable (Weick, 1976; Aldrich, 1979). A study is currently underway to test whether this deductive model can be verified in populations containing declining organizations (Whetten, 1979a).

#### Organizational Level

While organizational decline has, to some extent, been examined at the population level, most of the literature has used the organization as the unit of analysis. While the intent of population ecology studies is to identify gross organizational characteristics that predict survival, the research focus at this level is on internal processes. The research question shifts from, "Which members of the organizational population at Time 1 were present at Time 2?", to, "What is happening in these organizations as they experience and react to the changing conditions between Time 1 and Time 2?" While the first question is analogous to a biologist's study of changes in a gene pool over generations, the second question has no analogue in biology since it focuses on the purposive actions unique to social systems. The first examines structural configurations, the second examines the structure generating processes. The first is conducted by a diagnostician who makes inferences about what is inside based on surface conditions; the second is conducted by an anatomist who examines internal conditions directly.

The theoretical perspective most commonly used in this type of organizational research is the resource dependence model (Yuchtman and Seashore, 1967; Pfeffer and Salancik, 1978; Aldrich and Pfeffer, 1976) which is closely related to the political economy model (Walmsley and Zald, 1973; Benson, 1975). These models assume that managers make strategic decisions based on their assessment of the political and economic conditions in their environment. Specifically, they take actions to maintain adequate supplies of political legitimacy and economic resources.

Writers in this area tend to emphasize that organizations are either passive reactors, or aggressive initiators, in their intercourse with the environment. This ideological split carries over to the study of decline. Some, such as Boulding, profess an organizational life cycle theory which includes an "inexorable and irreversible movement towards

the equilibrium of death. Individual, family, firm, nation, and civilization all follow the same grim law, and the history of any organism is strikingly reminiscent of the rise and fall of populations on the road to extinction..." (1950, p. 38). (See also Downs, 1967). The "success breeds failure" and "failure stimulates further failure" organizational decline models which will be discussed later reflect this fatalistic philosophy (Starbuck et al., 1978; Argenti, 1976). A more optimistic view of decline is reflected in the work of Ansoff (1970) and Cyert and March (1963). These authors present a homeostatic model in which a decline in profits (or slack resources) triggers corrective actions to increase profits. While we are far from the point of being able to make a definitive statement about the utility of these two models, the field is gradually accumulating enough case studies of decline that a description of the contextual conditions under which each is likely to predominate is not far off. A review of these studies shows that they tend to emphasize either the source of decline, an organization's response to decline, or the effects of decline on other organizational activities. Works addressing these three topics will be discussed in turn.

## Sources of Decline

The sources of crises, which if responded to improperly precipitate organizational decline, can originate from within an organization (Greiner, 1972), or more frequently, from the environment (Scott, 1976). Some authors have focused on the sources of crises as though they were objective phenomenon (Balderston, 1972), while others have argued that the real source of a crisis is in the misperceptions of organizational members (Starbuck et al., 1978). A useful typology must therefore accom-

modate both orientations. The typology proposed by Levine (1978) in Figure 1 meets this requirement since it examines both internal and external causes. However, some modifications are needed to extend it beyond the public sector for which it was designed. Levine's four categories are organizational atrophy, political vulnerability, problem depletion, and environmental entrophy. A modified model also appropriate for business organizations consists of: organizational atrophy, vulnerability, loss of legitimacy, and environmental entrophy. 1

# Insert Figure 1 here

Organizational Atrophy. The consequences of organizations losing muscle tone is a recurring theme in the literature. A recent formulation of this argument has appeared in the work of Hedberg, Starbuck, Nystrom, and their associates, as the "success breeds failure" syndrome. Following the logic of Cyert and March (1963) they argue that organizations formulate heuristic programs for dealing with recurring problems. Unfortunately, "because situations appear equivalent as long as they can be handled by the same programs, programs remain in use after the situations they fit have faded away." (Starbuck and Hedberg, 1977). This produces the often maligned phenomena of organizational inertia (Behn, 1977; Cyert, 1978). Organizations that habitually use programs based on their previous utility tend to become desensitized to environmental change. As a result, organizations which were the most successful in the past become the most vulnerable to failure in the future.

While a decrease in responsiveness is generally associated with senility, in organizations it is not confined to the aged. The debili-

	Internal	External
Political	Political Vulnerability	Problem Depletion
Economic/ Technical	Organizational Atrophy	Environmental Entrophy

Figure 1: Levine's Model of the Causes of Public Organization Decline

tating effects of success can occur at any age. Tornedon and Boddewyn (1974) in their study of divestiture found a common pattern of young, aggressive, companies generating high profits which prompted the acquisition of overseas subsidiaries -- often before the establishment of a policy for long term overseas growth. Because of this topsy turvy growth pattern prompted by mercurial success, it later became necessary to divest many of these acquisitions as changing business conditions made it apparent that the organization had overextended itself. This sawtooth cycle of rapid growth followed by drastic retrenchment is common, and documents the fact that for organizations, as with humans, the incidence of death is not perfectly correlated with poor health or old age. For example, Altman (1971) reports that in 1970 over 279 million-dollar firms went broke. Further, in terms of age, he reports that one third of bankrupt businesses were less than three years old, 53% were younger than five, and 23% were over ten. (Surprisingly only 2% of the failures were less than one year old.)

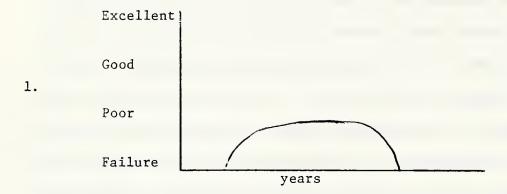
Argenti (1976) has identified three patterns of organizational decline. These are shown in Figure 2. Patterns #2 and #3 illustrate the different varieties of the "success breeds failure" syndrome we have discussed. In pattern #3 an organization has established an excellent performance record. It is a major producer in its industry and highly regarded as a solid on-going business concern—as exemplified by Penn Central and Rolls—Royce. At the point of initial decline the company has lost touch "....with their market or their customers or their employees....(hence)....although a major change has occurred no adequate response has been made. Perhaps two competitors have merged but the

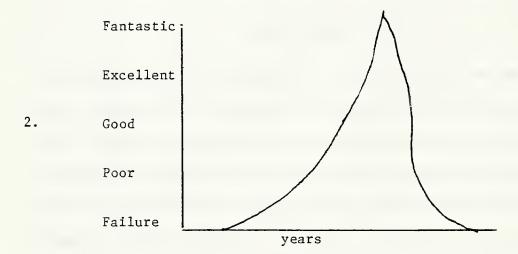
chief executive has decided 'it won't affect us'. Or the company has had its first strike which the board dismisses as being 'one of those things' when in fact it is a sign that they have lost touch with the shop floor." (Argenti, 1976, p. 162). This pattern reflects the classic case of a large, old, organization deluded by the myth of invulnerability. It confuses the achievement of age with immortality (being immune to the travails of this life). As Argenti notes, this smugness precipitates a slow but very painful death.

# Insert Figure 2 here

The second trajectory of decline illustrates the risk of mercurial success. In this case, rapid growth is followed by a precipitous decline because managers are intoxicated with success and become careless. Typically this type of organization is formed by a charismatic entreprenuer afflicted with the Midas touch. Unfortunately, counsel to level off the organization onto a steady state plateau is dismissed. This illustrates the extreme case of a growth oriented business ideology, as reflected in the refrain, "Beyond the clouds lie the stars. Beyond the stars lies the Great Absurd." (Argenti, 1976:159). This problem appears to be age old. It is reflected in Jethro's counsel to Moses (Exodus 18:13-26), and was discussed by Webber (1947) as the need to routinize charisma. In his study of English public schools Pettigrew (1979) found that the most critical phase in the organization's life cycle was at the peak of its early growth curve. At this point the entreprenuer-founder of those organizations which continued to be successful resigned and appointed a "manager" who could solidify his/her gains and initiate the

## Performance





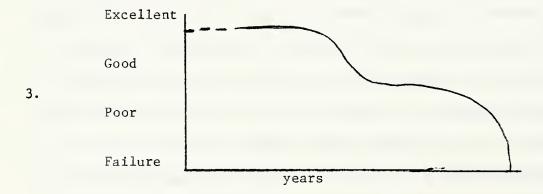


Figure 2: Three Patterns of Organizational Decline (Argenti, 1976: 150)

mundane rules, and coordination mechanisms required for continued development. The organization declined if the entrepreneur stayed too long.

It is apparent that neither slow nor fast growing organizations are immune to decline, although the two types of organizations face different problems. The fast growing organization is experienced in handling crises (Kotter and Sathe, 1978), so it has already established elaborate problem solving routines. This organization's vulnerability to decline lies in adequate problem recognition—rather than inadequate problem response. Having had little experience with this type of problem the organization is likely to discount symptoms of impending decline. On the other hand, slow growing organizations tend to be very sensitive to changes in their vital signs. Hence, their vulnerability to decline is not in problem recognition but in problem response. These organizations have so little slack that they may not be able to survive long enough to respond to the problem.

<u>Vulnerability</u>. The second source of organizational decline is vulnerability. In his classic work on life cycles, Stinchcomb (1965) noted that organizations are particularly vulnerable in their infancy. During this time they must overcome the "liabilities of newness".

Some of these are: temporary inefficiency due to inexperience, frequent interpersonal conflicts resulting from distrust, and the lack of a stable set of ties to customers, suppliers and regulators. The difficulty young organizations have clearing these initial hurdles is reflected in the death rate statistics for businesses reported above.

From these it appears that "infant mortality is more common than senility" (Argenti, 1967, p. 7). The first decline trajectory in Figure 2
highlights the vulnerability of young organizations. The problems
caused by the inexperience of youth illustrate the "failure breeds
further failure" form of decline. Argenti notes that business organizations which just never seem to get moving are typically formed by a
person with a technical orientation, e.g., engineer, architect, or
accountant.

In the public sector, political vulnerability is reflected in an agency's inability to resist budget decrements. Levine (1978) discusses some of the factors which contribute to vulnerability—most notably youth. "Small size, internal conflict, and changes in leadership, for example, seem less telling than the lack of a base of expertise or the absence of a positive self-image and history of excellence. However, an organization's age may be the most accurate predictor of bureaucratic vulnerability. Contrary to biological reasoning, aged organizations are more flexible than young organizations and therefore rarely die or even shrink very much." The postulated negative correlations between age and vulnerability is supported by Kaufman's (1976) study of turnover in federal agencies. During the period of 1923 to 1973 he found that newly established agencies had the highest death rate.

The fragility of a public institution's base of political support has been discussed by Mitnick (1978) and Shefter (1977). Shefter outlines a three stage model of municipal government fiscal crisis. First, a social group (such as the unions in New York City) gains considerable

power and demands a larger share of the public benefits. Second, the government agrees to the demands either because the group is too powerful to fight, or because it is a natural ally. Third, the government is too weak to finance these new claims by cutting benefits to other groups or by raising taxes. This disparity then triggers a political crisis which typically results in new government leadership.

Loss of Legitimacy. Benson (1975) has stressed the importance of legitmacy as an organizational resource and noted the propensity in some organizations to overemphasize the acquisition of economic resources and overlook the value of cultivating political acceptance. This is especially salient in the public sector. Rothman (1972) has linked the rise and fall of various criminal justice programs with shifts in societal ideology. As the prevailing views shifted from incarceration to rehabilitation, for example, organizations which embodied these values gained or lost public funding support. Levine (1978) has noted that problem depletion is a major cause of loss of legitimacy. Once the problem for which an agency was organized has been resolved this should presumably lead to the termination of the agency. However, Behn (1977) provides several interesting examples of the unrealistic optimism of this conclusion. For instance, the Temporary Commission of Investigation of the State of New York has recently issued its sixteenth annual report. The Federal Metal and Non-Metallic Mine Safety Board of Review was abolished only after its executive secretary confessed in a front-page interview that he had no work. The ability of an agency, or program, to establish a powerful constituency which allows it to function independent of its enabling

constitution makes it extremely difficult to terminate what appear to be anachronous organizations. This fact is reflected in the poor track record of presidents who have attempted to overhaul the executive branch, despite the sage counsel of astute political and administrative advisors (Brown, 1977). Reflecting on this problem, Bardach (1976) and Biller (1976) lament that in general founders of new public programs do their job of institution building too well. As a consequence, it is extremely difficult to dismantle an agency. Behn (1976) argues that supporters of an existing organization have the upper hand in a debate over the fate of a facility because their examples of specific problems that would result from a termination order (e.g., "Ten clients would have to travel 200 miles to receive comparable life sustaining treatments") are more compelling than the opponents' vague complaints about inefficiency or ineffectiveness. Hence, while loss of legitimacy is a potential source of decline and termination, it is one of the environmental threats many organizations are remarkably capable of deflecting.

Environmental Entrophy. The fourth source of decline stems from the reduced capacity of the environment to support an organization. Cyert (1978) has proposed that organizations in this situation have basically two options: 1. They can find another ecological niche, or, 2. They can scale down their operation. In the literature, the first (proactive) alternative has been emphasized by business authors while the second (reactive) alternative has been discussed primarily in the public and educational administration fields. The second group views the management of a declining organization as unfortunate victims of

circumstances, while the first group shows little sympathy for a crisis ridden management who they regard as having neither the vision or the will to initiate the innovations necessary to reverse the downward spiral of decline. Exemplifying the business orientation, Starbuck and Hedberg (1977), Ross and Kami (1973) and Barmash (1973) all argue that an organization's presence is in a stagnating environment says more about the organization's management than about the capacity of the environment. Barmash introduces his study of 15 corporate disasters with a clear statement of this orientation, "Corporations are managed by men; and men, never forget, manage corporations to suit themselves. Thus corporate calamities are calamities created by men." Hall's (1976) analysis of the demise of the Saturday Evening Post supports this position inasmuch as he noted that the egos of top administrators clouded their judgment at critical points in the magazine's life cycle.

On the other hand, work done in municipal public finance (Muller, 1975; Clark et al, 1976) and university administration (Green, 1974; Furniss, 1974; Trow, 1975) tends to emphasize the passive retrenchment option. This literature assumes that public organizations are captives of their environments—tethered to declining enrollments and eroding tax bases. This orientation is reflected in Behn's (1978) recommendation that public organizations adopt a matrix design so that expendable programs can be cut back easily when retrenchment becomes necessary.

While this dichotomy in the public and private sector literatures certainly reflects the fact that businesses have considerably more flexibility in changing their goals, product lines, etc., it also

appears to reflect a different orientation regarding organization/ environment relations in public and private organizations. Glassberg (1978), Boulding (1975), Cyert (1978), Millett (1977), and Molotch (1976) have all argued that one of the greatest needs in the public sector is for a new cadre of leaders who will aggressively respond to declining resources. This suggests a promising topic for research. The process of sense making in organizations has been discussed by Weick (1969, 1977a) and Pondy (1977), but little research has been conducted. The causal mapping work by Bougon et al (1977) holds promise and needs to be greatly expanded. Organizational members' beliefs regarding the sources of crises provides a rich setting for extending this pioneering work. Since the definition of a problem influences the potential solutions considered, it would be interesting to explore the possibility of institutional paradigms (i.e., world views in education, penology, city government, business, etc.) that cause members in different types of organizations to construct highly predictable, but institutionally different, causal explanations for decline. work reviewed here suggests the existence of these paradigm grounded causal maps, but few attempts have been made to systematically study this phenomenon within a comparative perspective.

A related research topic is the practice of denying the existence of a crisis. Why do some administrators respond quickly to the first signs of decline while others explain them away? In his study of school districts experiencing declining enrollments, Rodekohr (1974) found that several superintendents refused to accept the validity of data showing a decline in enrollment. In some cases this response was

the result of the short tenure of the administrator, but in other instances the superintendent was apparently simply not computing this threatening information. "Creative accounting" is a related defense mechanism identified in several case studies of business failures (Argenti, 1976). In some cases business managers deliberately hide negative financial data so as to not alarm stock holders and bankers, but in other cases managers simply will not accept the implications of the negative information conveyed by doomsayers and they juggle the accounting record till it supports what they are sure is a more accurate (and considerably more optimistic) reflection of the organization's health.

### Response to Decline

After managers have acknowledged a crisis situation and constructed a causal map for making sense out of it, a response is formulated. The literature on management responses to decline can be best organized around the central issue of attitude towards change. Figure 3 shows a continuum from "Change positively valued" to "Change negatively valued." The categories "Generating," "Responding," "Defending," and "Preventing," highlight important benchmarks along this dimension. Unlike the typical organization/environment relations typology, this one does not range from reactive to proactive (Thompson, 1967). Instead, the two extreme categories are proactive strategies while the center two are reactive responses. Inasmuch as most of the decline literature is couched in a responsive framework the reactive categories will be discussed first.

# Insert Figure 3 Here

Defending. The defending response to impending decline is typically found in highly bureaucratic settings, or in ideologically based institutions. Merton's (1957) classic work on the bureaucratic mentality proposed that members of large (and typically governmental) organizations tend to undergo a psychological means-end shift over time. is, adhering to the organization's rules and procedures becomes more important than fulfilling the objectives for which the rules were originally created. In this context members will likely respond to a proposed budget cut by defending the efficiency of the organization and the diligence of its members (Whetten, 1979b; Pfeffer and Salancik, 1978). In an ideologically based organization, such as a mental health facility, members are geared to defend the integrity of the institution. Hence, they will likely react to a proposed budget cut by arguing that the government "ought" to maintain their commitment to the social values embodied in the mission of the threatened organization (Hirchman, 1970). This is illustrated in the case of a drug rehabilitation center in New York City which had a recidivism rate of 100%. When the city officials attempted to close the facility political supporters accused the city of dropping its commitment to drug rehabilitation. As a result the officials felt compelled to continue funding the program even though it was not fulfilling its intended purpose (Roessner, 1979). Thus, while the ideologist defends his/her organization by pointing out the symbolic political and social implications of a cutback, the bureaucrat uses facts and figures to

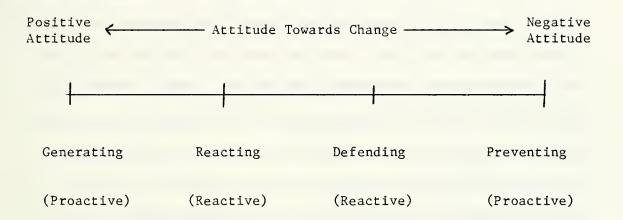


Figure 3: Management's Responses to Environmentally Induced Change

demonstrate that his/her organization does not deserve to be cut back because its members have been both diligent and frugal.

Responding. The responding mode has been discussed extensively in the public administration literature. Zald and Ash (1966) and Brouillette and Quarantilli (1971) have proposed models for predicting responses to decline. Levine (1978) has critiqued the common approaches to retrenchment, e.g., across the board cuts, cuts based on performance, lay-offs based on seniority. Mitnick (1978) outlined five steps for an agency responding to threatened termination. Furniss (1974), Smart and Vertinsky (1977), and Starbuck et al (1978) propose that a special decision making task force be formed to address issues of decline. They recommend that this "crisis corps" rely primarily on informal power and communication channels. This group would determine the severity of the crisis, present alternative courses of action, and in general prepare the organization to "weather out the storm." Boulding (1975) has called for the establishment of an "invisible college" between administrative officials in educational institutions to facilitate the exchange of lessons learned in responding to declining revenues and enrollments. To complement this informal network, a cadre of consultants who specialize in the management of declining organizations would be extremely useful. These people would be called into organizations in shock much like Red Adair is called into oil fields on fire.

An outside observer is particularly helpful under times of stress since they can help management avoid the common mistakes of "solving the wrong problem" and "attaching the wrong solution to the right problem"

(Cohen, et al, 1972). The first error is exemplified by the tendency to solve symptoms rather than underlying problems. Under crisis conditions managers prefer quick responses. An agreeable solution, even for the wrong problem, relieves tension and gives management the satisfaction of achieving success in the face of failure. Unfortunately, the true problem continues to grow and surfaces later as a calamity. A classic example of this management fallacy was depicted in the recent film "China Syndrome". After a malfunction at a nuclear power generator management thought they had found the cause, but overlooked evidence of more fundamental problems which nearly resulted in an ecological catastrophy.

The common error of "attaching the wrong solution to the right problem" in managing municipal financial crises and university decline has been noted by Glassberg (1978), Cyert (1978), Wildavsky (1964), and Cyert and March (1963). Their concern is based on theoretical work in the area of decision making. Wildavsky (1964) argues that decision makers tend to make incremental responses, because "men cannot ration—ally choose between alternatives drastically different from present reality." Cyert and March (1963) describe a similar tendency called problemistic search, i.e., people tend to search for solutions in the area closest to the problem. It appears that this tendency increases as a function of stress (Smart and Vertinsky, 1977; Bozeman and Slusher, 1979). Glassberg (1978) argues that one of the most common mistakes in handling municipal fiscal crises is that public officials propose incremental solutions for quantum problems. In his study of the decline of the Saturday Evening Post, Hall (1976) found that problemistic search

was one of the factors which precipitated the decline spiral. Between 1944 and 1946 the number of subscribers increased substantially. This in turn greatly increased production costs which led to a decline in the profit margin. Management's response was to increase the cost of a subscription which had the effect of drastically cutting back the number of subscribers. This decision initiated a period of stagnation and eventual decline.

The defense and response reactions described in this section have been discussed as though they are mutually exclusive decisions. In practice they are often linked together to form a more complex response pattern. In his analysis of the decline of civilizations, Toynbee (1947) noted that the initial response of a society to the threat of an invader is to retrench to traditional values. However, if the threat intensifies then the victim tends to capitulate and embrace wholeheartedly the culture of the aggressors. The willingness to accept the bad aspects of the invaders culture along with the good, eventually leads to the degeneration of the host society.

Preventing. A great deal has been written about organizations' deliberate efforts to manipulate their environments to increase their competitive advantage and to remove potential threats (Hedberg, et al, 1976; Perrow, 1979; Penrose, 1952; Post, 1978; Galbraith, 1971).

Tactics used include price fixing and other illegal practices (Staw and Szwajkowski, 1975), acquisitions (Pfeffer, 1972; Markham, 1973), buying political influence (Perrow, 1972), changing public opinion and influencing consumer preferences (Post, 1978), and shaping

economic and social policy (Sethi, 1977; Post, 1978). The logic invoked in describing these practices is that organizations act to avoid uncertainty. Hence, administrators act to prevent the need for responsive change (as opposed to self-initiated change). The skill of managers using these tactics is illustrated by an interview with one of John D. Rockefeller's sons. Asked if his father had ever broken any laws in building his immense oil empire, the son responded that he could not think of any laws broken by his father but he could name several that were enacted because of him. The extent to which businesses should be restrained (either by conscience or regulation) from engaging in practices that reduce the need for responsive change, while producing significant harmful side effects for others, is at the heart of the current debate over corporate social responsibility (Marris, 1974; Preston and Post, 1975; Walton, 1977).

Generating. The polar opposite attitude towards change is reflected by writers in the generating category. While the literature in the previous three categories was based on descriptions of current business practices, the writers in this category tend to be academics who encourage businessmen to turn about and embrace the enemy-responsive change. Relying on case studies of organizations which suffered substantial losses because they were too slow to respond, these authors argue in favor of "self designing organizations." These organizations are characterized by experimentation, informal communication lines, slack resources, loose performance evaluation criteria, tolerance for occasional failure, ad hoc jobs, frequent movement of personnel within

and between organizations, and most of all, a high incidence of innovation (Hedberg, et al, 1977; 1976; Starbuck, et al, 1978; Weick, 1977b; Staw, 1977; Bennis and Slater, 1968; Toffler, 1970; Landau, 1973).

Further, Hedberg, et al, (1976) argue that these organizations should look more like collapsible tents than stone palaces. That is, they should be characterized by minimal consensus, minimal contentment, minimal affluence, minimal faith, minimal consistency, and minimal rationality.

In reflecting on this literature one is struck by the telling differences between the descriptive and prescriptive work on this topic. Managers are described as being skilled at rigging the environment to prevent the need for change, slow in responding to unpredicted changes, inclined to select well used solutions to problems, and disposed to think of innovation only in terms of incremental changes in current practices. On the other hand, these writers warn managers that these practices will not be positively selected by the environments of tomorrow. This discrepancy reinforces the need for more ecological studies of organizations attempting to survive under different environmental conditions. There is also a need for further theoretical development of the self design orientation. The logical adequacy of this approach has been questioned by Wildavsky (1972) and Bozeman and Slusher (1978). In addition to responding to these criticisms, proponents need to give more consideration to the organizational and societal implications of the wide-spread adoption of their model. The prospect of managers, stock holders, workers, government regulators, and supporting social institutions all positively reinforcing frequent

and significant innovations in production organizations suggests the possibility of a run away innovation cycle which would have serious deleterious effects. There must be some negative loops built into the model to serve as a homeostatic mechanism and so far insufficient attention has focused on this matter. It is also questionable whether organizations have the capacity to become self designing. This model suggests a level of rationality which organizations may simply not be capable of achieving, especially during times of crisis when the need to self design is greatest. The work of March and Simon (1958), Cyert and March (1963), Cohen et al (1972), Rubin (1977), Benveniste (1977), and Smart and Vertinsky (1977) suggest that this is indeed the case. This conclusion is illustrated in the following account from Forrester's (1971) "Counterintuitive Behavior of Social Systems."

"Our first insights into complex social systems came from our corporate work. Time after time we have gone into a corporation which is having severe and well-known difficulties. The difficulties can be major and obvious such as a falling market share, low profitability or instability of employment.... Generally speaking we find that people perceive correctly their immediate environment.... In a troubled company, people are usually trying in good conscience and to the best of their abilities to solve the major difficulties. Policies are being followed at the various points in the organization on the presumption that they will alleviate the difficulties. One can combine these policies into a computer model to show the consequences of how the policies interact with one another. In many instances it then emerges that the known policies describe a system which actually causes the troubles. In other words, the known and intended practices of the organization are fully sufficient to create the difficulty, regardless of what happens outside the company or in the marketplace. In fact, a downward spiral develops in which the presumed solution makes the difficulty worse and thereby causes redoubling of the presumed solution." (p. 55)

This observation underscores the need for the self design proponents to reconcile the incongruity between their prescriptions and the natural tendency for administrators under stress to reflexively select contrary responses. The fact that this incongruity exists is not by itself problematic, but the fact that it is hardly mentioned in the self design literature is troubling. If managers under stress need to behave contrary to their reflexive patterns, considerable reflection and research will be required to discover methods for countering these tendencies. Hence, the self design literature needs to move beyond its prescriptive mode and come to grips with the knotty issues of implementation, especially during periods of stress inducing decline.

## Effects of Decline

A declining resource base has wide-spread effects. It affects the state of mind and career patterns of the staff and the manner in which business is conducted in the organization.

At the level of the individual organizational member, the most profound effect of decline is increased stress. As slack resources dwindle, the margin for error in an organization decreases. While the stakes for making good decisions increase, the penalties for making bad ones increase also. As the tension and pressure mounts, morale tends to sag (Behn, 1978) and high turnover follows (Levine, 1979). To alleviate turnover in declining organizations Levine (1979) suggests new forms of compensation which make exit very costly (e.g., deferred payment schedules for fringe benefits like profit sharing and retirement). A related consequence is increased interpersonal conflict. In declining organizations more people find that they are losing more

often with little prospect for making up current resource losses in future allocations (Levine, 1978; Starbuck, et al, 1978). To alleviate these negative consequences Cyert (1978) proposes establishing new goals and evaluation criteria early in the decline process as a means of reducing uncertainty and increasing integration. Yetten (1975) has argued for new leadership models adjusted for the stress factor in crisis situations. In this vein, Glassberg (1978) has examined the leadership style of mayors which are most effective during fiscal crises and Yetten (1975) and Levine (1979) both note that managers in decline conditions rely less on participative decision making in order to avoid conflict.

This literature points out the need for research on the ability of conventional theories about leadership, conflict resolution, decision making, and communication to explain behavior during the crisis of retrenchment. Since they were typically developed and verified using observations from expanding organizations, there is scarcely an organizational model or theory which does not require recalibration for conditions of decline.

One of the more disturbing effects of decline is that it tends to penalize most those who can least afford it—and in some cases least deserve it. This occurs both at the individual and organizational levels. Generally, the first staff members to be dismissed during a period of retrenchment are the low skilled, low income, minority (including women), young, or very old. These are the people who will have the most difficulty absorbing the loss of wages and finding a new job (Levine, 1978). The organizational effect of this action is to decrease the

internal pool of variability within the organization and increase the average age of the labor pool (Levine, 1979). When these effects of involuntary discharges are coupled with the fact that those who choose to leave the organization are those best qualified to formulate creative responses, the overall effect of decline on personnel turnover is to produce a "regression to the mean" effect in labor pool qualifications.

A similar phenomenon occurs at the departmental level. The most common form of retrenchment is to distribute the cuts more or less evenly across all units. This option is politically more feasible than cutting off an entire program or department because it is less likely to be sharply contested. The consequence of this approach is that a cut-back hurts those that deserve it the least, i.e., the most efficient. A highly efficient unit has the greatest difficulty implementing a retrenchment order since it has operated with less fat in the past (Levine, 1979).

Another effect of decline is on the rate of organizational innovation. While the literature suggests a strong relationship between decline and innovation, the sign of the correlation is disputed. Some authors have argued that decline will hamper innovation. For example, Smart and Vertinsky (1977) and Bozeman and Slusher (1978) have proposed that during crises managers are paralyzed by a fear of failure. Hence, they become more conservative, rather than more innovative. In the public sector this takes the form of trimming the fat from existing programs, rather than exploring radically new service delivery alternatives (Whetten, 1979b). On the other hand, Wilson (1972) has argued that

organizations are not likely to adopt significant innovations until they experience a major crisis. The regenerative benefits of crises have also been stressed by Lindbloom (1968) and Glassberg (1978).

This lack of consensus regarding the effect of decline on innovation highlights again the incongruity between prescriptions for, and descriptions of, the management of stressful situations. This observation underscores the pressing need for more research on decision making under conditions of stress. One hypothesis that warrants examination is that organizations follow the response pattern of threatened nations, described by Toynbee (1947). A small amount of stress may cause members to "clutch", i.e., to have their creative faculties impaired by fear. However, as the threat increases in intensity a threshold may be reached that triggers a desperate effort to generate creative alternatives. This proposition is consistent with Miller's "General Theory for the Behavioral Sciences." He argues that all "living systems respond to continuously increasing stress first by a lag in response, then by an overcompensatory response, and finally by catastrophic collapse of the system" (1955:27). Miller's three stage response model highlights a paradox of innovation. If we first assume that the overcompensatory response of organization's facing decline-induced-stress is the initiation of multiple innovations as an act of desperation; then we can conclude that under certain conditions innovation actually contributes to a system's collapse. Of course, not all innovations have this dysfunctional consequence, but when they are initiated under conditions of stress it appears highly probable that this unintended consequence will result.

This conclusion points out the need for more research on the effect of innovation on decline. While it is implied in the self-design literature that a high level of innovation is associated with high organizational performance, others have argued that the relation-ship is curvilinear, i.e., either too little, or too much, innovation leads to low performance (Smith, 1963; Argenti, 1976). This proposition is consistent with research on the effect of stress on individual performance which has shown that performance is highest at an optimal level of stress, i.e., the highest point on an inverted U curve (Schuler, 1979).

The ultimate effect of decline is death--whether this is the outcome of a deliberate effort to terminate an ineffective public program, or the consequence of poor management in a small business. While research on organizational death is beginning to emerge in the literature (Kaufman, 1976; Hall, 1976; Aldrich and Reiss, 1976; Behn, 1976) it is hampered by a lack of consensus on what organizational death represents. Does it occur when there is a change in the name of the organization? When all its members are replaced? When the facility is moved? Does it make a difference if these events are the result of a merger, as compared with a business failure? One of the most difficult situations to classify is the case where a legal corporation ceases to exist but its organizational operation continues to function. In the business literature an organization is divided into three tiers. The enterprise controls the economic assets, the managerial level controls human resources, and the firm directs the production activity. In many mergers (and divestitures) there is no

change at the firm or managerial levels—only the legal name of the enterprise is changed. Similarly, in his study of federal agencies, Kaufman (1976) found that the functions performed by a terminated agency are often transferred to another agency.

Some clarity is achieved by distinguishing between death and failure. A study of death examines whether an organization still exists, a study of failure focuses on the causes of death. Organizational failure connotes total ineffectiveness due to managerial incompetence, political vulnerability, or environmental entrophy (Pfeffer and Salancik, 1978). Hence, a failure would be considered a fatality in an organizational decline study even if its staff and programs (or products) are transferred to other organizations. In the business sector, the event of organizational death due to failure is qualitatively very different from organizational death due to transformation, as in the case of a merger. An organization that is acquired must by definition have some marketable assets. The fact that it is purchased indicates that it is currently successful or that it has the potential for becoming such. While both types of organizational death present interesting research issues, death due to failure is more closely related to our interest in the organizational consequences of the emerging era of scarcity.

## Summary and Conclusions

The objectives of this paper were to bring together a diverse body of literature relating to organizational decline, and to surface important research topics in the process. We have discussed the concept of

decline and examined the conceptual and empirical work related to this topic at the population and organizational levels of analysis. At the organizational level we examined the causes, responses to, and effects of decline.

This review has surfaced two major dysjunctions in the literature. First, authors addressing decline in the public sector tend to have a different orientation than those writing about crises in business organizations. In the business sector organizational death is viewed as suicide--in the public sector it is treated as homocide. In the private sector declining profits are regarded as evidence of stagnating management, rather than environmental scarcity. Conversely, in the public sector, decline tends to be viewed more as a characteristic of the environment than of the organization. Hence, authors in this area speak of cut back management as though it is the only option. In the private sector this response is regarded as a last recourse--appropriate only after all proactive strategies have failed. This discrepant orientation reflects a difference in the level of autonomy in the two sectors. Public administrators generally have less freedom to relocate their organization to a new ecological niche. However, several authors have noted that this is often more apparent than real, i.e., public administrators may have more degrees of freedom than they choose to consider. Hence, the need for a more aggressive breed of public administrators has been stressed. To facilitate this process, the needs for more dialogue between business and public administrators, and mechanisms for disseminating information about innovative options selected by public administrators have been noted.

Second, there is a significant discrepancy between descriptions of how managers actually react to decline-induced-crises, and prescriptions for how they should react. Under pressure managers tend to become more conservative, rather than innovative; and more autocratic, rather than participative. Advocates of a self-design approach to organizational administration prescribe the opposite responses. In a crisis situation, managers should examine a wide range of alternatives, discredit past responses, and solicit extensive inputs from others. The fact that there is a discrepancy between ideal and actual behavior does not warrant concern. However, the fact that these prescribers generally do not examine the feasibility of implementing their prescriptions does. Consequently, there is a substantial need for research on organizational operations under crisis conditions to discover how innovative alternatives can be substituted for reflex reactions -- when they are desirable. Further, to avoid the dysfunctional consequences of innovation suggested by Miller's (1955) three stage model of response to stress, we need more information on how managers can use innovation as a strategy based on calculation, rather than desperation. In the former case it is analogous to a rifle shot aimed at a specific target, in the latter case it is like a shotgun blast searching for a target. In general, there is a significant need for more interdisciplinary research on responses to stress. Research previously conducted at the physiological (Slye, 1976; Cooper and Marshall, 1976; Gal and Lazarus, 1975), psychological (McGrath, 1970; Levi, 1967), and organizational (Sales, 1964; Colligan, et al., 1977; House, 1974; Smart and Vertinsky, 1977) levels needs to be integrated and applied to decline as a special case of stress.

To complement this research on stress there is a considerable need for case studies of organizational responses to decline. Especially critical is information about the choice between alternative responses. It is apparent that different options have been chosen by different organizations but we have little data on the factors influencing this choice process. In addition to longitudinal participant observations, information on this topic can be collected from historical records of organizations that have undergone retrenchment. Accounts of how single organizations and entire industries have managed these situations provide a rich data base for the development of inductive models (Rubin, 1977; Smith, 1963).

Interdisciplinary research is especially important in assessing the effects of decline. The decline of an organization can affect organizational members' emotional health and morale, family stability, inter-departmental relations, decision making procedures, community labor market dynamics, and interorganizational relations. Research on the likely effects of wide-spread decline in an era of scarcity might produce radical reformulations of our theories of job design, employee compensation, organizational design, career development, and leader-ship. In addition, it might argue for new forms of government, commerce, and society. These and other challenging research frontiers lie ahead.

#### Footnotes

This typology includes a much wider range of causes than those proposed in the business literature. For instance, Miller (1977) and Argenti (1976) identify the following causes: impulsive decisions, that overextend the organization's assets, not responding to change, an executive that is either too powerful or poorly informed (absentee owner), and taking unnecessary risks.

As an aside, after formulating this typology I was intrigued to discover its similarity to a model of managerial response to stress developed by Burgoyne (1975). His categories are avoidance, defense mechanisms, learning. This typology is also similar to one proposed by Miles et al (1974): Domain Defenders, Reluctant Reactors, Anxious Analyzers, Enthusiastic Prospectors.

An interesting example of this occurred in the New York State University system. A few years ago when the higher education budget in that state was cut significantly, most of the campus presidents chose to distribute the cuts evenly across all departments. However, one president distributed the reduced resource pool on the basis of past performance, projections of the future enrollments by discipline, etc. He initiated a massive evaluation of the campus programs and used the outcomes as his criteria for allocation. Some programs were cut to the bone while others were increased substantially. This action created such a political uproar in the faculty, student body, alumni, and interest groups linked with the gutted departments that he was forced to leave the university shortly thereafter.

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